

Claims

1. A recording apparatus that records first data in a recordable recording medium, the recording apparatus characterized by comprising:

recording means that records the first data in the recording medium;

generating means that generates, for each predetermined recording unit, second data indicating a model of the own apparatus; and

calculating means that applies a predetermined function to third data, which is included in the first data recorded in the recording medium by the recording means and changes every time the first data is recorded in the recording medium by the recording means, to thereby calculate a discrimination code indicating that the recording apparatus recorded the first data in the recording medium, and in that

the recording means further records the discrimination code calculated by the calculating means, the third data, and the second data generated by the generating means in the recording medium.

2. A recording apparatus according to claim 1, characterized in that the calculating means calculates the discrimination code by applying a function for reducing an amount of data to be smaller than the third data to the third data.

3. A recording apparatus according to claim 2, characterized in that the calculating means calculates the discrimination code by applying a hash function to the third data.

4. A recording apparatus according to claim 1, characterized in that the third data includes at least data recorded only by the recording apparatus.

5. A recording apparatus according to claim 4, characterized in that the third data includes data for managing a program area of the recording medium and control data for the recording medium.

6. A recording apparatus according to claim 1, characterized in that the second data generated by the generating means includes, for each predetermined recording unit, data indicating that the recording was performed by an apparatus of the model of the recording apparatus and data indicating that the recording was performed by an apparatus of a model different from the recording apparatus.

7. A recording apparatus according to claim 1, characterized in that the calculating means calculates the discrimination code by applying the function to the second data and the third data, which are parts of the first data.

8. A recording method for a recording apparatus that records first data in a recordable recording medium, the recording method characterized by comprising:

a first recording step of recording the first data in the recording medium;

a generating step of generating, for each predetermined recording unit, second data indicating a model of the own apparatus;

a calculating step of applying a predetermined function to third data, which is included in the first data recorded in the recording medium by processing in the first recording step and changes every time the first data is recorded in the recording medium by the processing in the first recording step, to thereby calculate a discrimination code indicating that the recording apparatus recorded the first data in the recording medium; and

a second recording step of further recording the discrimination code calculated by the processing in the calculating step, the third data, and the second data generated by the processing in the generating step in the recording medium.

9. A program for recording first data in a recordable recording medium, the program characterized by causing a computer to execute processing comprising:

a first recording step of recording the first data in the recording medium;

a generating step of generating, for each predetermined recording unit, second data indicating a model of own

apparatus;

a calculating step of applying a predetermined function to third data, which is included in the first data recorded in the recording medium by processing in the first recording step and changes every time the first data is recorded in the recording medium by the processing in the first recording step, to thereby calculate a discrimination code indicating that the recording apparatus recorded the first data in the recording medium; and

a second recording step of further recording the discrimination code calculated by the processing in the calculating step, the third data, and the second data generated by the processing in the generating step in the recording medium.

10. A reproducing apparatus that reproduces first data recorded in a recording medium, the reproducing apparatus characterized by comprising:

readout means that reads out, from the recording medium, second data indicating a model of a recording apparatus that performed recording of the first data in the recording medium, third data that changes every time data is recorded in the recording medium, and a first discrimination code indicating the model of the recording apparatus that recorded the first data in the recording medium, the second data, the third data, and the first discrimination code being included in the first

data;

calculating means that calculates a second discrimination code indicating the model of the recording apparatus, which recorded the first data in the recording medium, by applying a predetermined function to the third data read out by the readout means; and

executing means that executes predetermined processing using the second data when the second discrimination code calculated by the calculating means and the first discrimination code read out by the readout means coincide with each other.

11. A reproducing apparatus according to claim 10, characterized in that the calculating means calculates the second discrimination code by applying a function for reducing an amount of data to be smaller than the third data to the third data.

12. A reproducing apparatus according to claim 11, characterized in that the calculating means calculates the second discrimination code by applying a hash function to the third data.

13. A reproducing apparatus according to claim 10, characterized in that the third data includes at least data recorded only by the recording apparatus.

14. A reproducing apparatus according to claim 13, characterized in that the third data includes data for managing

a program area of the recording medium and control data for the recording medium.

15. A reproducing apparatus according to claim 13, characterized in that the calculating means calculates the second discrimination code by applying the function to the second data and the third data.

16. A reproducing method for a reproducing apparatus that reproduces first data recorded in a recording medium, the reproducing method characterized by comprising:

a readout step of reading out, from the recording medium, second data indicating a model of a recording apparatus that performed recording of the first data in the recording medium, third data that changes every time data is recorded in the recording medium, and a first discrimination code indicating the model of the recording apparatus that recorded the first data in the recording medium, the second data, the third data, and the first discrimination code being included in the first data;

a calculating step of calculating a second discrimination code indicating the model of the recording apparatus, which recorded the first data in the recording medium, by applying a predetermined function to the third data read out by processing in the readout step; and

an executing step of executing predetermined processing using the second data when the second discrimination code

calculated by processing in the calculating step and the first discrimination code read out by processing in the readout step coincide with each other.

17. A program for reproducing first data recorded in a recording medium, the program characterized by causing a computer to execute processing comprising:

a readout step of reading out, from the recording medium, second data indicating a model of a recording apparatus that performed recording of the first data in the recording medium, third data that changes every time data is recorded in the recording medium, and a first discrimination code indicating the model of the recording apparatus that recorded the first data in the recording medium, the second data, the third data, and the first discrimination code being included in the first data;

a calculating step of calculating a second discrimination code indicating the model of the recording apparatus, which recorded the first data in the recording medium, by applying a predetermined function to the third data read out by processing in the readout step; and

an executing step of executing predetermined processing using the second data when the second discrimination code calculated by processing in the calculating step and the first discrimination code read out by processing in the readout step coincide with each other.